

Missouri Department of Natural Resources

Total Maximum Daily Load Information Sheet

Little Beaver Creek

Waterbody Segment at a Glance:

County: Phelps
Nearby Cities: Rolla
Length of impairment: 0.1 miles

Pollutant: Volatile Suspended Solids

(VSS)

Source: Rolla SW Wastewater

Treatment Plant

Change from NFR to VSS

TMDL Priority Ranking: Low



Description of the Problem

Beneficial uses of Little Beaver

- Livestock and Wildlife Watering
- Protection of Warm Water Aquatic Life and Human Health associated with Fish Consumption
- Whole Body Contact

Use that is impaired

- Protection of Warm Water Aquatic Life
- Whole Body Contact

Standards that apply

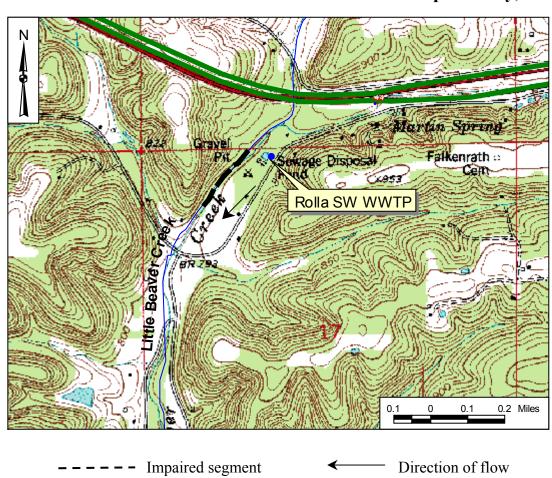
- The standards for volatile suspended solids (VSS) may be found in the general criteria section of the WQS at 10 CSR 20-7.031(3)(A) and (C).
 - Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses.
 - Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses.

Any waterbody that was listed for Non-filterable Residue (NFR) in 1998 is now being listed for Volatile Suspended Solids (VSS). This change was made to better distinguish between solids coming from wastewater treatment plants (VSS) and solids coming from soil erosion or erosion of mine waste materials or stockpiles (Non-Volatile Suspended Solids or NVSS).

Revised 4/2002 1

Little Beaver Creek shows an accumulation of objectionable solids downstream of the Rolla Southwest Wastewater Treatment Plant (WWTP) and an adjoining sand and gravel washing operation. Volatile suspended solids refer to particles that are suspended in water, like algae, or those that settle out, like the sewage sludge in Little Beaver Creek. When these solids settle onto the streambed, they smother natural substrates (stream bottom), aquatic invertebrate animals, and fish eggs. Like all wastewater discharges in Missouri, this facility has to meet the requirements of a discharge permit issued by Missouri Department of Natural Resources. The department plans additional studies of the aquatic invertebrates in the stream. If these studies show that the stream is not meeting water quality standards, the discharge permit will be amended. Meeting the new requirements will result in improved water quality in Little Beaver Creek.

Rolla SW Treatment Plant on Little Beaver Creek in Phelps County, Missouri



For more information call or write:

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Program Home Page: www.dnr.state.mo.us/wpscd/wpcp/index.html

Revised 4/2002 2